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Please find below and/or attached an Office communication concerning this application or proceeding.

		<u> </u>
	Application No.	Applicant(s)
	09/942,112	MARSHALL ET AL.
Office Action Summary	Examiner	Art Unit
	Michael P. Ferguson	3679
The MAILING DATE of this communication a Period for Reply	appears on the cover sheet with t	the correspondence address
A SHORTENED STATUTORY PERIOD FOR REF WHICHEVER IS LONGER, FROM THE MAILING - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory perion. - Failure to reply within the set or extended period for reply will, by stat Any reply received by the Office later than three months after the may earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICA- 1.136(a). In no event, however, may a repty od will apply and will expire SIX (6) MONTHS tute, cause the application to become ABANI	TION. be timely filed from the mailing date of this communication. DONED (35 U.S.C. § 133).
Status		
1)☐ Responsive to communication(s) filed on <u>03</u> 2a)☒ This action is FINAL . 2b)☐ TI 3)☐ Since this application is in condition for allow closed in accordance with the practice unde	his action is non-final. vance except for formal matters	• •
Disposition of Claims		
4) ☐ Claim(s) 1-24 is/are pending in the application 4a) Of the above claim(s) 23 is/are withdrawn 5) ☐ Claim(s) 1-9 is/are allowed. 6) ☐ Claim(s) 10-13,16-22 and 24 is/are rejected. 7) ☐ Claim(s) 14 and 15 is/are objected to. 8) ☐ Claim(s) are subject to restriction and	n from consideration.	
Application Papers		
9) ☐ The specification is objected to by the Examination The drawing(s) filed on 28 August 2001 is/are Applicant may not request that any objection to the Replacement drawing sheet(s) including the correction The oath or declaration is objected to by the	e: a)⊠ accepted or b)⊡ objec ne drawing(s) be held in abeyance. ection is required if the drawing(s) i	See 37 CFR 1.85(a). s objected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority docume 2. Certified copies of the priority docume 3. Copies of the certified copies of the priority docume application from the International Bure * See the attached detailed Office action for a list	ents have been received. Ents have been received in Applicationity documents have been received in Application (PCT Rule 17.2(a)).	ication No eived in this National Stage
Attachment(s) Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/0 Paper No(s)/Mail Date 12/18/01.		mary (PTO-413) ail Date nal Patent Application (PTO-152)

DETAILED ACTION

Examiner notes that the previous Office action, mailed March 1, 2006, was improperly indicated as a final action. The previous Office action should been indicated as a non-final action.

Election/Restrictions

1. Claim 23 is withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made without traverse in the reply filed on September 13, 2004.

Claim Objections

2. Claim 19 is objected to because of the following informalities:

Claim 19 (line 2) recites "the openings". It should recite --the slots--.

For the purpose of examining the application, it is assumed that appropriate correction has been made.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claims 10,11 and16-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Lendi (US 3,969,855).

As to claim 10, Lendi discloses a joint comprising:

a first metal plate 17;

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a second metal plate 17 having an edge thereof disposed adjacent an edge of the first plate;

a facing strip 4 configured to engage the first and second plates, the facing strip being bent along the center thereof such that only the edges 23 of the facing strip which are parallel to the bend contact the plates; and

at least one bracket **22** attached to the facing strip and having a slot capable of receiving the shank of a bolt **10** and capable of preventing the head of a bolt from passing therethrough and for holding the bolt to the facing strip without penetrating through the facing strip; and

at least one bolt 10 for holding the facing strip against the plates (Figures 1-4).

As to claim 11, Lendi discloses a joint wherein the at least one bracket 22 comprises a plurality of brackets (not shown; inherently, at opposite ends of facing strip 4) having slots, and wherein at least two of the brackets having slots disposed on opposite sides from one another (Figures 3-4).

As to claim 16, Lendi discloses a method capable of reducing splatter through a opening in a bullet trap, the method comprising:

disposing first and second plates 17 adjacent one another so as to leave an opening;

selecting a facing strip 4, the facing strip being bent lengthwise into an angle; selecting a plurality of attachment bolts 10;

attaching the plurality of attachment bolts to the facing strip such that the bolts do not penetrate the facing strip;

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placing a facing strip over the opening generally parallel to the opening so that the facing strip slopes rearwardly and outwardly such that the only portion of the facing strip brought into engagement with the first and second plates to secure the plates together is the lateral edges 23 of the facing strip (Figures 1-4).

As to claim 17, Lendi discloses a method comprising attaching the plurality of attachment bolts 10 to the facing strip 4 with brackets 22 (not shown; inherently, at opposite ends of facing strip 4) prior to the placement of the facing strip against the plates 17 (Figures 3-4).

As to claim 18, Lendi discloses a method comprising removably positioning the bolts 10 in the brackets 22 (Figure 4).

As to claim 19, Lendi discloses a method wherein at least two of the brackets 22 (not shown; inherently, at opposite ends of facing strip 4) have slots for receiving the bolts 10, and wherein the slots are disposed on opposing sides of the brackets (Figures 3-4).

As to claim 20, Lendi discloses a method capable of forming a section of a bullet trap, the method comprising:

placing first and second plates 17 adjacent one another so as to leave a seam therebetween;

selecting a joint strip having a facing strip 4 which is beveled to have two rearwardly extending walls terminating at lateral edges 23 and a bracket 22 permanently attached to the facing strip (bracket 22 is permanently attached to facing strip 4, if one chooses not to remove nut 11 from bolt 10) for holding an end of a bolt 10

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to the facing strip, the bracket being attached to the facing strip independent of the bolt; and

covering the seam between the plates with the facing strip so that the bolt extends through the seam: and

engaging the lateral edges of the facing strip with the first and second plates so that the only portion of the facing strip which touches the first and second plates is the lateral edges (Figures 1-4).

As to claim 21, Lendi discloses a method comprising placing a backing strip 9 along the seam on the side of the plates 17 opposite the joint strip (Figure 4).

As to claim 22, Lendi discloses a method comprising selecting a joint strip having a plurality of brackets **22** (not shown; inherently, at opposite ends of facing strip **4**) attached to the facing strip **4** for holding a plurality of bolts **10** (Figures 3-4).

Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 13 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lendi.

As to claim 13, Lendi discloses a joint comprising:

a pair of metal plates 17 disposed such that an edge of one plate is adjacent the edge of the other plate;

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a joint strip disposed to cover the adjacent edges of the plates comprising:

a facing strip 4 defining a pair of sloped walls extending outwardly and rearwardly from a central portion extending along a long axis of the facing strip such that only the edges 23 of the sloped walls contact the plates: and

means 22 for attaching a plurality of bolts 10 to the facing strip without the bolts penetrating through the facing strip comprising a plurality of brackets 22 (not shown; inherently, at opposite ends of facing strip 4) permanently attached to the facing strip (bracket 22 is permanently attached to facing strip 4, if one chooses not to remove nut 11 from bolt 10), each of the brackets being configured to receive a bolt 10;

a backing strip **9** disposed to cover the adjacent edges of the plates on the side of the plates opposite the facing strip; and

a plurality of bolts **10** for holding the facing strip, plates. and backing strip together (Figures 1-4).

Lendi fails to discloses a joint comprising a pair of steel plates.

The applicant is reminded that the selection of a known material based upon its suitability for the intended use is a design consideration within the skill of the art. In re Leshin, 227 F.2d 197, 125 USPQ 416 (CCPA 1960). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify a joint as disclosed by Lendi to have a pair of steel plates as such material is a well-known, widely used and commercially available material within the art.

As to claim 24, Lendi discloses a method capable of forming a bullet proof joint, the method comprising:

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placing an edge of a first metal plate 17 adjacent an edge of a second plate 17 so as to form a joint,

selecting a joint strip, the joint strip comprising a facing strip 4 which is formed to have two rearwardly extending walls terminating at lateral edges 23 and at least one bracket 22 permanently attached to the facing strip (bracket 22 is permanently attached to facing strip 4, if one chooses not to remove nut 11 from bolt 10) for holding an end of a bolt 10 to the facing strip, the at least one bracket being attached to the facing strip independent of the bolt; and

covering the joint between the steel plates with the joint strip so that the only portion of the facing strip which touches the first and second plates is the lateral edges (Figures 1-4).

Lendi fails to discloses a method comprising a pair of steel plates.

The applicant is reminded that the selection of a known material based upon its suitability for the intended use is a design consideration within the skill of the art. In re Leshin, 227 F.2d 197, 125 USPQ 416 (CCPA 1960). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify a method as disclosed by Lendi to comprise a pair of steel plates as such material is a well-known, widely used and commercially available material within the art.

7. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kellogg (US 1,724,601).

As to claim 24, Kellogg discloses a method capable of forming a bullet proof joint, the method comprising:

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placing an edge of a first plate **B** adjacent an edge of a second plate **B** so as to form a joint,

selecting a joint strip, the joint strip comprising a facing strip **J** which is formed to have two rearwardly extending walls terminating at lateral edges and at least one bracket **E** permanently attached to the facing strip (bracket **E** is permanently attached to facing strip **J**, if one chooses not to remove the facing strip from the bracket) capable of holding an end of a bolt to the facing strip, the at least one bracket being attached to the facing strip independent of the bolt; and

covering the joint between the plates with the joint strip so that the only portion of the facing strip which touches the first and second plates is the lateral edges (Figures 1-3).

Kellogg fails to discloses a method comprising a pair of steel plates.

The applicant is reminded that the selection of a known material based upon its suitability for the intended use is a design consideration within the skill of the art. In re Leshin, 227 F.2d 197, 125 USPQ 416 (CCPA 1960). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify a method as disclosed by Kellogg to comprise a pair of steel plates as such material is a well-known, widely used and commercially available material within the art.

8. Claims 10,12,16,20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kellogg in view of Dalbec (US 4,028,856).

As to claim 10, Kellogg discloses a joint comprising:

a first metal plate B;

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a second metal plate **B** having an edge thereof disposed adjacent an edge of the first plate;

a facing strip **J** configured to engage the first and second plates, the facing strip being bent along the center thereof such that only the edges of the facing strip which are parallel to the bend contact the bullet proof plates; and

at least one bracket **E** attached to the facing strip and having a slot capable of receiving the shank of a bolt and capable of preventing the head of a bolt from passing therethrough and for holding the bolt to the facing strip without penetrating through the facing strip; and

at least one nail I for holding the facing strip against the plates (Figures 1-3).

Kellogg discloses a joint comprising a nail I for holding the facing strip J against the plates B, instead of a bolt (Figure 2).

Dalbec teaches a joint comprising a bolt **40** for holding a facing strip **22** against first and second plates **20** (Figure 5). Inasmuch as the references disclose nails and bolts as art recognized equivalents, it would have been obvious to one of ordinary skill in the exercise art to substitute one for the other. <u>In re Fout</u>, 675 F.2d 297, 301, 213 USPQ 532, 536 (CCPA 1982).

As to claim 12, Kellogg fails to disclose a joint wherein the facing strip has two walls disposed about 155 degrees from one another.

The applicant is reminded that a change in the shape of a prior art device is a design consideration within the skill of the art. <u>In re Dailey</u>, 357 F.2d 669, 149 USPQ 47 (CCPA 1966). Accordingly, it would have been obvious to one having ordinary skill in

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the art at the time the invention was made to modify a joint as disclosed by Kellogg wherein the facing strip has two walls disposed about 155 degrees from one another as such practice is a design consideration within the skill of the art.

As to claim 16, Kellogg discloses a method capable of reducing splatter through a opening in a bullet trap, the method comprising:

disposing first and second plates **B** adjacent one another so as to leave an opening;

selecting a facing strip **J**, the facing strip being bent lengthwise into an angle; selecting a plurality of attachment nails **I**;

attaching the plurality of attachment nails to the facing strip such that the nails do not penetrate the facing strip;

placing a facing strip over the opening generally parallel to the opening so that the facing strip slopes rearwardly and outwardly such that the only portion of the facing strip brought into engagement with the first and second plates to secure the plates together is the lateral edges of the facing strip (Figures 1-3).

Kellogg discloses a method comprising a plurality of nails I, instead of bolts (Figure 2).

Dalbec teaches a method comprising a plurality of bolts **40** (Figure 5). Inasmuch as the references disclose nails and bolts as art recognized equivalents, it would have been obvious to one of ordinary skill in the exercise art to substitute one for the other.

In re Fout, 675 F.2d 297, 301, 213 USPQ 532, 536 (CCPA 1982).

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As to claim 20, Kellogg discloses a method capable of forming a section of a bullet trap, the method comprising:

placing first and second plates **B** adjacent one another so as to leave a seam therebetween;

selecting a joint strip having a facing strip J which is beveled to have two rearwardly extending walls terminating at lateral edges and a bracket E permanently attached to the facing strip (bracket E is permanently attached to facing strip J, if one chooses not to remove the facing strip from the bracket) capable of holding an end of a bolt to the facing strip, the bracket being attached to the facing strip independent of the bolt; and

covering the seam between the plates with the facing strip so that a nail I extends through the seam: and

engaging the lateral edges of the facing strip with the first and second plates so that the only portion of the facing strip which touches the first and second plates is the lateral edges (Figures 1-3).

Kellogg discloses a method comprising a nails I, instead of a bolt (Figure 2).

Dalbec teaches a method comprising a bolt **40** (Figure 5). Inasmuch as the references disclose nails and bolts as art recognized equivalents, it would have been obvious to one of ordinary skill in the exercise art to substitute one for the other. <u>In re</u> <u>Fout</u>, 675 F.2d 297, 301, 213 USPQ 532, 536 (CCPA 1982).

As to claim 21, Kellogg discloses a method comprising placing a backing strip **A** along the seam on the side of the plates **B** opposite the joint strip **J** (Figure 2).

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Allowable Subject Matter

9. Claims 1-9 are allowed.

10. Claims 14 and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the

limitations of the base claim and any intervening claims.

11. The following is a statement of reasons for the indication of allowable subject

matter:

As to claim 1, Lendi discloses the claimed joint with the exception of at least one bracket comprising a slot extending inwardly from an edge of the at least one bracket, the at least one bracket being welded to the facing strip.

As to claim 7, Lendi discloses the claimed joint with the exception of comprising a facing strip being bent along the center thereof so as to define two sides and so as to form an angle less than 180 degrees between the two sides such that the two sides extend both outwardly and backwardly from the center thereof; and at least one bracket comprising a flat piece of plate steel having a slot formed therein, the at least one bracket being disposed in a generally planar relationship to the lateral strip and being welded to the facing strip.

As to claim 14, Lendi discloses the claimed joint with the exception of wherein the facing strip is bent lengthwise into an angle of about 155 degrees, and wherein sides of the facing strip extend linearly so as to contact the bullet proof steel plates ony at an edge thereof.

There is no teaching or suggestion, absent the applicants' own disclosure, for one having ordinary skill in the art at the time the invention was made to modify the joint as disclosed by Lendi to have the above mentioned elemental features.

Response to Arguments

12. Applicant's arguments filed March 3, 2006 have been fully considered but they are not persuasive.

As to claim 10, Attorney argues that:

Lendi does not disclose a joint comprising at least one bracket attached to the facing strip and having a slot for receiving the shank of a bolt and preventing the head of a bolt from passing therethrough.

Examiner disagrees. As to claim 10, Lendi discloses a joint comprising at least one bracket 22 attached to the facing strip 4 and having a slot capable of receiving the shank of a bolt 10 and capable of preventing the head of a bolt from passing therethrough (Figure 4).

As to claim 13, Attorney argues that:

Lendi does not disclose a joint comprising a plurality of brackets permanently attached to the facing strip, each of the brackets being configured to receive a bolt.

Examiner disagrees. As to claim 13, Lendi discloses a joint comprising a plurality of brackets 22 (not shown; inherently, at opposite ends of facing strip 4) permanently attached to the facing strip (bracket 22 is permanently attached to facing strip 4, if one

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chooses not to remove nut **11** from bolt **10**), each of the brackets being configured to receive a bolt **10** (Figures 1,3 and 4).

As to claims 20 and 24, Attorney argues that:

Lendi does not disclose a method wherein a bracket is *permanently attached* to the facing strip for holding an end of a bolt to the facing strip.

Examiner disagrees. As to claims 20 and 24, Lendi discloses a method wherein a bracket 22 is permanently attached to the facing strip 4 (bracket 22 is permanently attached to facing strip 4, if one chooses not to remove nut 11 from bolt 10) for holding an end of a bolt 10 to the facing strip (Figure 4).

As to claim 10, Attorney argues that:

Kellogg does not disclose a joint comprising at least one bracket attached to the facing strip and having a slot for receiving the shank of a bolt and preventing the head of a bolt from passing therethrough.

Examiner disagrees. As to claim 10, Kellogg discloses a joint comprising at least one bracket **E** attached to the facing strip **J** and having a slot capable of receiving the shank of a bolt and capable of preventing the head of a bolt from passing therethrough (Figure 2).

As to claims 20 and 24, Attorney argues that:

Kellogg does not disclose a method wherein a bracket is *permanently attached* to the facing strip for holding an end of a bolt to the facing strip.

Examiner disagrees. As to claims 20 and 24, Kellogg discloses a method wherein a bracket E is permanently attached to the facing strip J (bracket E is

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permanently attached to facing strip **J**, if one chooses not to remove the facing strip from the bracket) capable of holding an end of a bolt to the facing strip (Figure 2).

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael P. Ferguson whose telephone number is (571)272-7081. The examiner can normally be reached on M-F (8:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571)272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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